As a general interpretation of symptoms, furnished by this manner of view, we may say that:

(*a*) *Paralysis* is due to a rupture, either of cells or fibres, belonging to the mechanism of the motor nervous apparatus.

(*b*) *Anæsthesia* is due to a rupture in the sensory nervous mechanism.

(*c*) *Tremor* is the effect of a hindrance in the conductibility of the white fibres.

(*d*) *Convulsions* (including those of chorea) are the result of an irritation of the gray substance.

(*e*) *Precocious* and *transitory contractures* are the effect of pressure on a ganglion.

Since the entire nervous system is a vast mechanism of cells and fibres, its functional action ought to be described in terms of cells and fibres, we thus avoid the ambiguities so hurtful to progress, and obtain a true physiological localization.

In some remarks on Dr. Broadbent's communication, Prof. Schiff stated his opinion that the true motor centres are not directly excitable by electrical, chemical, or mechanical irritation, and that the only means to determine the function of any part of the brain was by extirpation. He had extirpated the motor centre for the face in dogs; the movements were preserved, but tactile sensibility was abolished, and from the phenomena here observed he concluded that the so-called motor centres were only centres for tactile sensibility. He had made this the subject of experiments, the results of which he had given in the second edition of his *Lecons sur l'Encephale.* These conclusions are perhaps not applicable to man, who, with his superior organization, may perhaps have motor centres on the surface of the brain.

THE INFLUENCE OF CENTRIFUGAL ACTION ON THE CIRCULATION OF THE BRAIN.—M. Salathé reported to a recent meeting of the Paris Academy of Sciences, the results of some experiments performed by him to test the effects of position and centrifugal forces on the condition of the blood supply of the brain in rabbits, He found that if he suspended a rabbit, head downward, even for many hours, death did not ensue, but it was certain to follow rapidly the suspension of the animal in the opposite position, with the head upward. Death was due in this case to cerebral anæmia.

If the rabbit was placed on a rapidly turning plane, it succumbed to either cerebral congestion or anæmia, according as its head was directed toward the periphery or toward the centre of the turning plane. If it was fastened laterally, no serious consequences followed.

The following are the titles of some other recent papers on the Anatomy and Physiology of the Nervous System:

LAUTENBACH, On the Functions of the Cerebral Lobes, *Am. Jour. Med. Science*, October, 1877; WALSH, The Anatomy of the Brachial Plexus, *Ibid;* OUDIN, Perforation of the Cranium by Gun-shot Wound, Experiments on the Cerebral Pulsations, *Revue Mensuelle*, December, 1877; STRUMPELL, On the Theory of Sleep; *Pflugers Archiv.* L. XI., Oct. 23, 1877; NOTHNAGEL, Experimental Researches on the Functions of the Brain; VIRCHOW'S *Archiv.* LXXI. III; KUESSNER, Vaso-motor Centres in the Cerebral Cortex, *Centralbl.f. d. Med. Wissensch.* No. 45, 1877; RETZIUS, Contribution to our Knowledge of the Nerve Tubes in the Plagiostomes, *Nordiskt Med. Archiv.* No. 23; SEELIGMUELLER, On the Study of the Motor Functions of the Cortex, and its Clinical Utilization, *Deutsche Med. Wochenschr.*, Nos. 47 and 48: OTT, The Inhibitory Function of the Spinal Cord, *Philadelphia Med. Times*, Dec. 8; MAJOR, The Structure of the Island of Reil in Apes, *Lancet*, (Am. repr.) October, 1877.

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b.—PATHOLOGY OF THE NERVOUS SYSTEM AND MIND, AND PATHOLOGICAL ANATOMY.

OPHTHALMOSCOPIC APPEARANCES IN INSANITY.—Ophthalmoscopic examination in insanity was made by Klein, *Wien. Med. Presse*, 1877; No. 3. (Abstr. in *Centralblatt*, No. 29,) in 134 patients, of whom 42 were afflicted with general paresis, 19 with mania, 19 with epilepsy, 17 with alcoholism, 4 with apoplexy, 6 with melancholia, 1 with ataxia, and 26 with divers forms. In 89 cases positive results were obtained, which he divides into two categories, one of 31 and the other of 58 cases. In the first class K found 9 times retinitis, 8 times discoloration of the optic nerve, 6 times atrophy, and 8 times hyperæmia of the retina. The second class consisted of 29 congenital anomalies, and 29 cases of a peculiar opacity resembling the senile metamorphosis of the retina. Since this change was found in 18 cases out of 42 of general paresis, K. terms it *retinitis paralytica.* It was also found, however, though more rarely, in other forms of insanity. During an epileptic attack, K. observed retinal ischæmia and clonic spasm of the iris.

MYELITIS,—At the session of the International Medical Congress in Geneva, in September last (rep. in *La France Médicale*), M. Proust, of Paris, presented in his own name and that of M. Joffroy, a memoir entitled "Contribution to the Study of Acute Myelitis," an observation of a case of apoplectiform onset, apparently succeeding a fall, which was really only its first symptom. He summed up in the following conclusions:

1. In a nosological point of view, myelitis frequently presents an abrupt beginning, which we at times attribute to spinal hemorrhage.